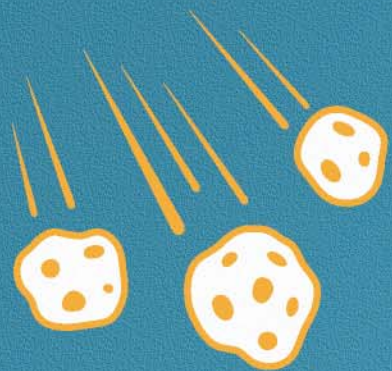


# The Renaissance of Public Sector Prize Competitions

A brief comparative analysis of trends in the US and Europe







## Introduction

“No matter who you are, most of the smartest people work for someone else.” Governments and other institutions have long known the truth behind Joy’s Law, and have been using prize competitions to draw out those hidden innovators and to capitalize on their problem-solving horsepower.

In fact, since the 1700’s governments such as the US and the UK have publically challenged innovators to solve problems they were unable to tackle on their own. During the past decade, there has been a renewed interest in prize competitions in the US<sup>1</sup> and Europe. As prizes continue to grow in popularity, we are seeing similarities and differences emerge across continents and in the future, we believe prizes will likely continue to attract an ever-growing number of citizen problem solvers and gain legitimacy among a wide variety of institutions.

This concise analysis of US and EU trends hopefully proves useful for government, business, and philanthropic leaders as they use prizes and challenges to achieve better outcomes.

## Prize Competition Definition

Prizes and challenges are competitions between individuals, communities, government entities, businesses, institutions, or non-profit organizations to achieve defined goals in a defined time frame. They can use incentives – which can include monetary rewards or non-cash rewards like recognition – to identify the best models, increase participation, or achieve progress in a certain area of need. They are open to all and generate ideas from a broad cross-section of citizens, including many new entrants or unlikely problem-solvers.

## Innovation Prizes and Challenges State of Affairs in the US

One hundred and ten years ago, humankind achieved manned flight for the first time as two brothers soared through the skies of Kitty Hawk, North Carolina. Last year, over three billion people traveled by air.<sup>2</sup> While most will recognize the brave accomplishments of the Wright Brothers, few realize their work was driven by the US Army’s desire to only pay for success – what we might call today an incentive prize or a grand challenge.<sup>3</sup> After an investment of \$50,000 in research grants to the head of the US Smithsonian failed to produce tangible results, the Army took a page from British history and offered a prize for results, not research.<sup>4</sup> **With the Wright Brothers, the US Army was deliberately transferring risk and paying only for outcomes,** and on December 23, 1907, the Signal Corps of the US Army issued “Specification No. 486” to the public for the creation and successful demonstration of a “heavier-than-air flying machine”—the rest is history.<sup>5</sup>

In the US, prizes are experiencing a renaissance. Since the early 2000s, when modern challenges first sent a private manned spacecraft into orbit, countless other philanthropies, private companies, and government agencies have administered prizes to entice inventors and entrepreneurs to solve difficult challenges.<sup>6</sup>

The Obama Administration picked up the mantle to support prize competitions with the Strategy for American Innovation.<sup>7</sup> By 2010 the US government launched Challenge.gov, a central platform of public-sector prizes.<sup>8</sup> Later that year the US Congress passed the America COMPETES Reauthorization Act, which broadly enabled all US federal agencies to conduct innovation challenges. Since 2009, the US government has conducted 443 challenges and awarded more than \$120 million in prizes.<sup>9</sup>

The pace of prize and challenge issuance by U.S. government agencies has increased as well, from 150 challenges in the first two years since the COMPETES Act was signed to nearly 400 by year five.

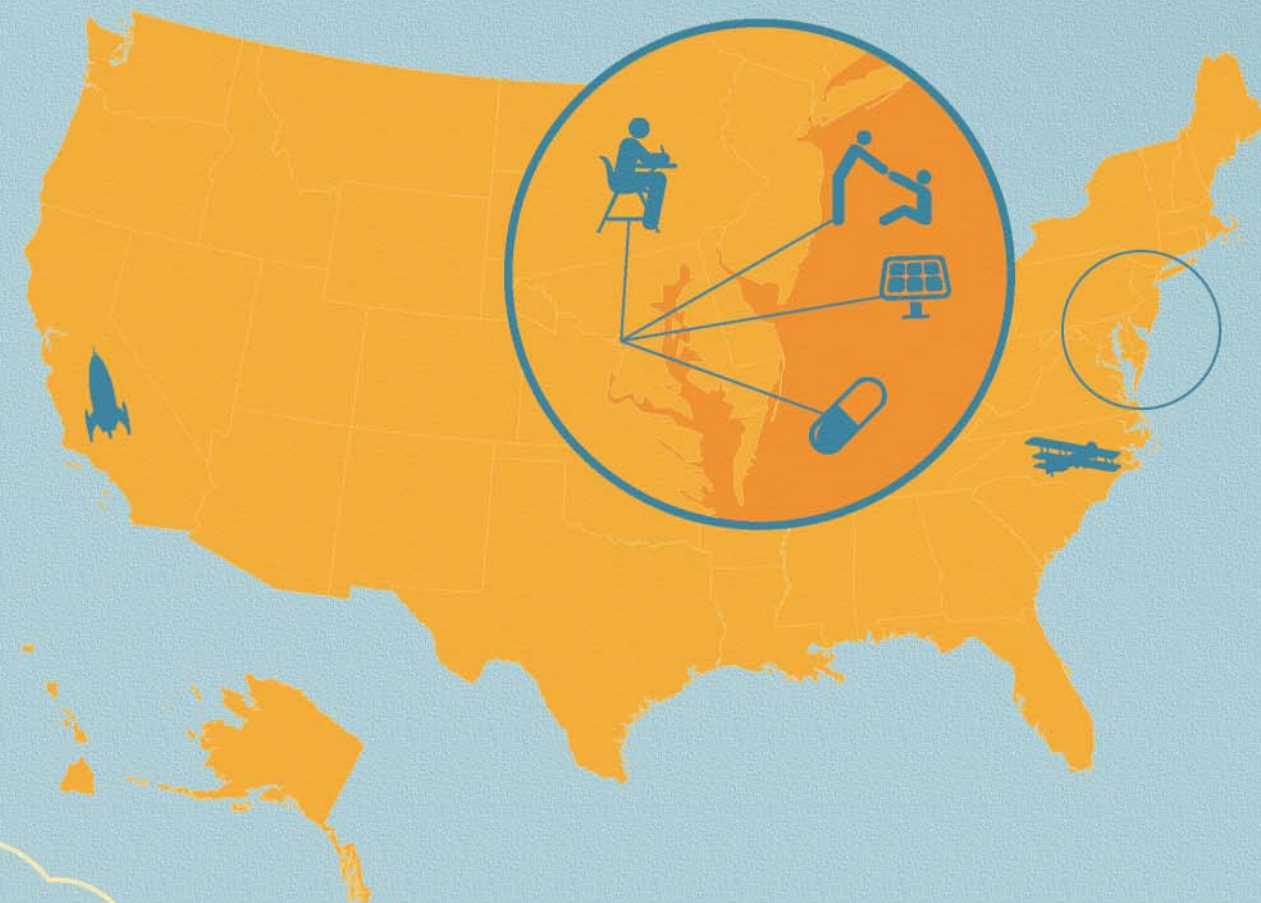
The number of prizes grew by 10 percent since March 2015 alone.<sup>10</sup> **In the US, between 2010 and 2015, over 75 national government departments and agencies have run prize competitions.** Many government agencies—such as the Department of Health and Human Services (HHS) and the Department of the Interior (DOI)—have gone further to implement enterprise wide strategies and policies promoting the use of prizes competitions on an ongoing basis.

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The prizes themselves have ranged widely in scope. Cash prizes, some in the multi-million dollar range, provide traditional financial incentives. Other

prizes that offer promotions and government endorsement of their winners appeal to more career or socially driven participants. The topics covered by US public sector innovation challenges are equally vast—ranging from garnering investments for clean energy to education reform. For example, the DOE’s National Clean Energy Business Plan Competition (NCEBP) funded leading tech research to help create clean energy businesses,<sup>11</sup> while the Aspen Institute’s Prize for Community College responded directly a call to action by the White House by using a prize to help change the role of community college in the US.

As interest in prizes has grown among prize designers, it has also skyrocketed among participants - since 2009, innovation prizes in the US have engaged over 150,000 challenge solvers.<sup>12</sup> With this growing community, US prize designers are growing the next generation of social innovators and creating communities of engaged problem solvers across industries and issues.





**Innovation Prizes and Challenges  
State of Affairs in Europe**

As with the US, innovation challenges in Europe are not a new phenomenon. One of the earliest prize competitions was administered by the British government in the 1700s to find more accurate marine navigation through the Longitude Prize.<sup>13</sup> In the last few years, however, there has been significant growth in the number of prize competitions launched in Europe as well. Just last summer, Bloomberg Philanthropies brought together leaders from 21 European cities – after having down selected from over 150 submissions – and used a €9m grand challenge to incent urban innovation across the continent. The nations ranged from Western European capitals such as London and

In the era of increasing transparency and open government, Europeans are using challenges as a way to drive public engagement. The challenges themselves, as well as the solutions, are increasingly crowdsourced.

Athens, to Central and Eastern cities of Sofia, Krakow, and Gdansk all convened in Berlin for the Mayors Challenge Ideas Camp to create innovative solutions to urban challenges such as diabetes prevention, elderly care, unemployment, and assisting the visually impaired.<sup>14</sup>

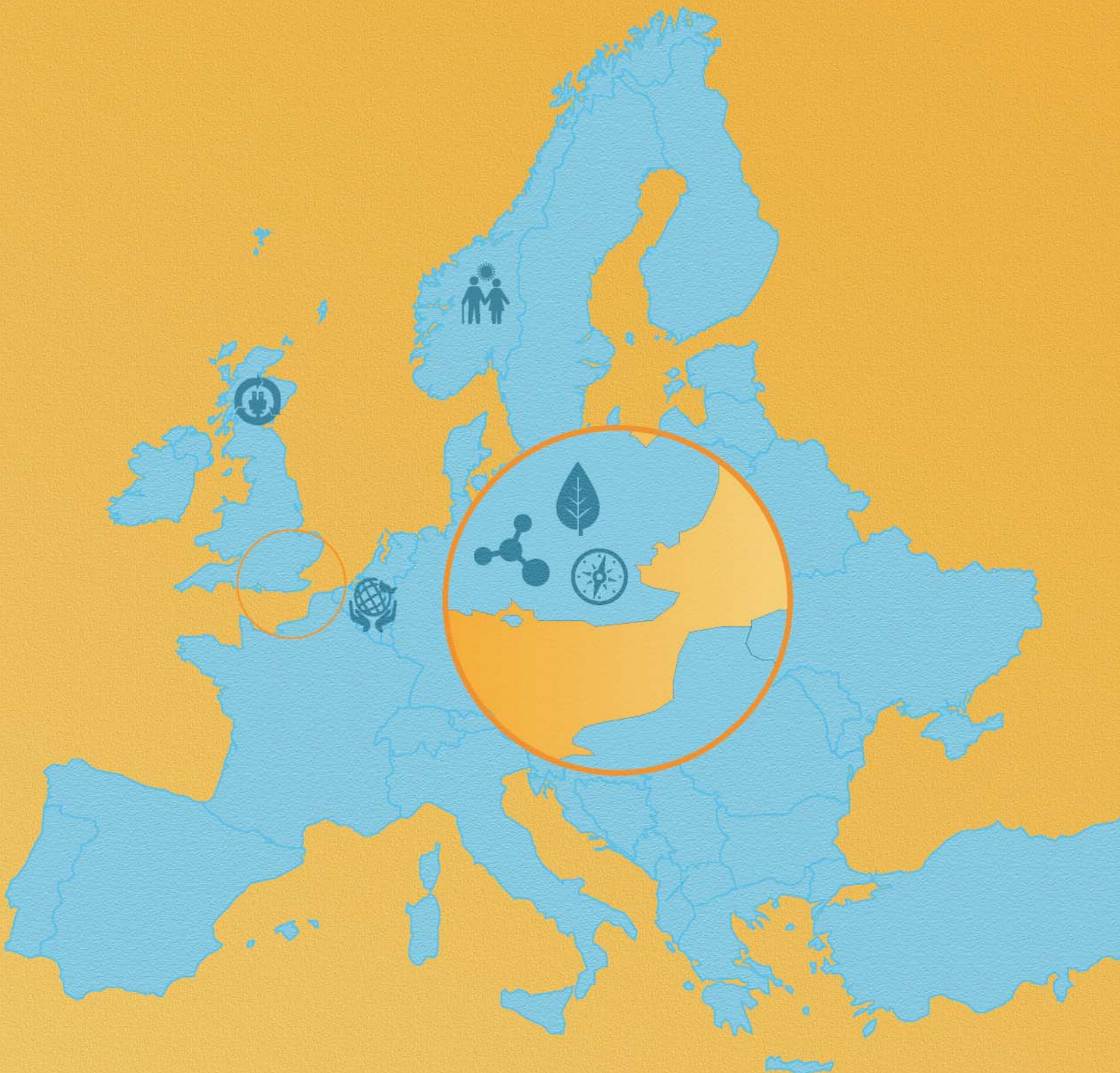
Among European governments, the United Kingdom is the frontrunner for the number of challenge prizes launched in the last decade. For example, in 2007, the UK launched the Big Green Challenge, a £1m challenge to encourage and support community-led responses to climate change.<sup>15</sup>

Just a year later the Scottish Government launched the £10m Saltire Prize for innovation in the field of renewable marine energy.<sup>16</sup> Due to the recent growing interest in experimenting with the use of challenge prizes to tackle some of the most pressing issues in society, Nesta and the UK Department for Business, Innovation & Skills (BIS) co-founded the Centre for Challenge Prizes with the mission to grow the challenge prize field itself.<sup>17</sup> **Last year, the Centre for Challenge Prizes launched the world’s first democratically-selected challenge prize, the £10m Longitude Prize which will help to solve the global problem of antibiotic resistance.**<sup>18</sup>

The use of prize competitions is also increasing across the Nordic countries. The Nordic Independent Living Challenge was launched by the five Nordic city capitals to find solutions that can help elderly and disabled people live independently in their own homes. Sweden is also slated to enter the incentive prize market as the innovation agency Vinnova is now in the process of developing a challenge prizes strategy for the coming years.<sup>19</sup>

Even supra-national bodies such as the European Commission have moved into the prizes space. In 2012, the Commission launched the first European Social Innovation Competition to support and build a network of social innovators across Europe. In addition, the Commission established the Horizon Prizes as a new way to reward breakthrough solutions to unmet societal or technological challenges, with the first five challenges offering a total reward of up to €6 million.<sup>20</sup>

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Looking Ahead: Key Prize Developments on the Horizon

Business-as-usual approaches to problem solving are coming up short as societies around the world face growing needs far faster than their governments can craft solutions. Challenges and prizes are just one set of tools in this evolving public sector toolkit that is particularly effective at soliciting the best ideas from a wide range of actors. As more government agencies design their own prizes, the general landscape will continue to change. Below are what we consider the top three trends to watch for over the coming years.

Governing with more problem solvers

Both the US and EU will see an increase in the number of prize competitions administered in the near term. Challenges are becoming bolder and more sophisticated in the US—with an increasing number of challenges bringing in partners from other agencies or other sectors to expand their scope. In 2011, only one of the seven COMPETES-authorized challenges brought in partners from outside the US national government – for example, when Health and Human Services partnered with academic institutions such as the University of Hawaii.<sup>21</sup> In 2013, 68 percent of COMPETES challenges in the US brought in partners to broaden their reach and impact, and in 2014 56 percent did the same—often involving the private and social sectors.<sup>22</sup> Challenges are also on the rise in the EU, where they are

seen as a valid way to source lower-cost, innovative ways to deliver social services in times of austerity and fiscal constraints, for example as the Ageing Well Challenge Prize sought to improve the lives of the elderly by reducing social isolation and increasing mobility at little or no cost to the UK government.<sup>23</sup>

Likewise, in both the US and EU, agencies and organizations involved in prizes and challenges are increasingly looking to engage impacted communities in the challenge identification and prize design processes. In the EU, for example, voting is currently on-going to decide which challenge will be addressed by the first ever Horizon Prize for Social Innovation.<sup>24</sup> Hundreds of thousands of problem solvers are being involved through co-design platforms and crowdsourcing.<sup>25</sup>

Institutionalizing prizes and challenges with 21st century public servants

Organizations and government agencies are increasingly investing in prizes and challenges—not only in terms of financial incentives, but also in terms of full-time staff dedicates explicitly to innovation. Many US agencies have dedicated personnel specifically in charge of design and administration of prizes and challenges, including at NASA, HHS, the Environmental Protection Agency, and the US Agency for International Development. The Department of Homeland Security, for example, established the Prize and

Organizations and government agencies are increasingly investing in prizes and challenges—not only in terms of financial incentives, but also by dedicating full-time staff explicitly to innovation.

Checklist to help institutionalize innovation challenges in the Department.<sup>26</sup>

From these efforts has emerged a robust network of interested prize designers and administrators. In the US, the General Services Administration has developed the Federal Challenges and Prizes Community of Practice—a group involving over 500 interested federal employees across many agencies—to find ways to drive public interest and engagement in innovation prizes and challenges.<sup>27</sup> While this is largely occurring in the US, the UK has the dedicated Centre for Challenge Prizes, and the European Commission also has dedicated staff. Other European government agencies may likely follow suit.

Moving beyond technology to social impact

Prize competitions have often been a catalyst to incent breathtaking advancements in technology. From the Wright Brother’s maiden voyage to a private manned space flight, new industries and technical capabilities have emerged

Small Business Innovation Office, whose dedicated staff have drafted a Guidebook and Prize Competition Manager’s

largely due to well-designed and executed prizes. In a world where both economic and social issues ripple across borders, governments are now increasingly turning to prizes to generate technology enabled solutions to social challenges. It is in this intersection, when technological advancements are applied to unsolved social challenges, where there appears to be significant opportunity to use prizes to create significant social advancement. There’s early evidence that governments are taking up this mantle. In the UK and Nordic countries, governments are running prizes on inclusive technology that empower disabled individuals.<sup>28</sup> The White House, the Department of Justice, the Department of Health and Human Services in concert with the Department of Housing and Urban Development all came together to launch Reimagine: Opportunity. This was the first of three challenges designed to improve the support infrastructure for survivors of modern-day slavery. The 160 applicants yielded 12 highly innovative solutions.<sup>29</sup>

With incentive prizes acting as a catalyst, technological development is often seen as a way to deliver services and solutions to citizens both faster, cheaper, and at scale. A \$20 million dollar prize from the National Institute for Health and the UK’s £10 million Longitude Prize are battling the massive public health problem of antibiotic resistant bacteria. These examples, if successful, serve as a blueprint for a future where governments and private organizations can engage a diverse, motivated set of solvers to truly tackle the world’s most pressing challenges.



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